



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/614,898 | 07/12/2000 | Clark Woody | J 2850 | 2434 |

28165 7590 03/11/2002

S.C. JOHNSON & SON, INC.
1525 HOWE STREET
RACINE, WI 53403-2236

EXAMINER

WEEKS, GLORIA R

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3721

DATE MAILED: 03/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/614,898

Applicant(s)

WOODY ET AL.

Examiner

Gloria R Weeks

Art Unit

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

Drawings

1. Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 7-8, 14-17, and 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Coleman et al. (USPN 5, 546,732).

In reference to claims 1, Coleman et al. discloses a method of severing and sealing a film formed of a thermoplastic material (column 3, lines 28-30) comprising the steps of: heating a cutting edge implement (121) to a temperature sufficient to melt but not to burn the thermoplastic material (column 5, lines 15-16); feed a plurality of layers of (28, 30, 34; column 5, lines 13-15); moving the cutting edge implement (121) and the opposing surface (122) relative to one another to pinch the plurality of layers of film therebetween (column 5, lines 21-25); and thereafter , suspending any relative lateral movement between the cutting edge implement (121), the film (28, 30, 34), and the opposing surface (121), while relatively biasing the cutting edge implement (121) and the opposing surface (122) together with the plurality of layers of film (28, 30, 34) pinched therebetween, until the cutting edge implement (121) cuts through the plurality of layers of film (28,

Art Unit: 3721

30, 34), contacts the opposing surface (122), and seals the plurality of layers of the film together (column 5, lines 25-28).

Regarding claim 2 and its limitations as stated above, Coleman et al. discloses a method of severing and sealing a film formed of a thermoplastic material wherein the moving step comprises the step of advancing the cutting edge implement (121) in a direction substantially perpendicular relative to a contact area of the opposing surface (122; figures 15-16; column 5, lines 21-25).

With respect claims 3, 7 and their limitations as stated above, Coleman et al. discloses a method of severing and sealing a film formed of a thermoplastic material wherein the suspending step comprises synchronously moving the cutting edge implement (121), the film (28, 30, 34), and the opposing surface (122) in substantially the same lateral direction (column 7, lines 18-28; figures 15-16).

Regarding claim 8, Coleman et al. discloses a method of severing and sealing a film comprising the steps of: clamping the film (28, 30, 34) between opposing surfaces (118a, 118b, 121, 122); column 5, lines 21-25); heating a cutting edge implement (121) to a temperature sufficient to melt but not to burn the thermoplastic material (column 5, lines 15-16; and moving the cutting edge implement (121) past one of the opposing surfaces (118a; figure 15) toward the other surface (118b, 122) so that the cutting edge implement (122) presses against the film toward the other surface (122) for a period of time sufficient to sever the film and seal the resulting severed edge (column 5, lines 13-28).

In reference to claim 14 and its limitations as stated above, Coleman et al. discloses a method of severing and sealing a film wherein the clamping step comprises clamping the film between a rotating drum (118a, 118b) and an anvil (122) that travels around a closed path at approximately the peripheral speed of the rotating drum (column 7, lines 18-27).

With respect to claim 15, Coleman et al. discloses an apparatus for severing and sealing a film formed of a thermoplastic material (column 3, lines 28-30) comprising the steps of: a cutting edge implement (121) that is heatable to a temperature sufficient to melt but not to burn the thermoplastic material (column 5, lines 15-16); an anvil (122); means for feeding a plurality of layers of (28, 30, 34; column 5, lines 13-15) between the cutting edge (121) and the anvil (122); means for moving the cutting edge implement (121) and the anvil (122) relative to one another to pinch the plurality of layers of film (28, 30, 34) therebetween (column 5, lines 21-25); and means for suspending any relative lateral movement between the cutting edge implement (121), the film (28, 30, 34), and the anvil (121), while pressing the cutting edge implement (121) toward the anvil (122) with the film (28, 30, 34) pinched therebetween, until the cutting edge implement (121) melts through the plurality of layers of film (28, 30, 34), contacts the anvil (122), and seals the plurality of layers of film together (figures 15-16; column 5, lines 25-26).

In reference to claim 16 and its limitations as stated above, Coleman et al. discloses an apparatus for severing and sealing a film formed of a thermoplastic material further comprising: means (120) for laterally moving the cutting edge implement (121) along a closed path; and means for moving the anvil (122) along a path that is at least in part substantially parallel to a portion of the closed path traveled by the cutting edge implement (121; figures 15-16).

Regarding claim 17 and its limitations as stated above, Coleman et al. discloses an apparatus for severing and sealing a film formed of a thermoplastic material wherein the cutting edge implement (121), the film (28, 30, 34), and the anvil (122) all synchronously move in substantially the same lateral direction while the film is melted and sealed (column 7, lines 18-28).

With respect claim 23, Coleman et al. discloses a method for severing and sealing a film formed of a thermoplastic material (column 3, lines 28-30) comprising the steps of: pinching a

Art Unit: 3721

plurality of layers of the film (28, 30, 34) between a substrate (122) and a cutting edge implement (121) that is heated to a temperature sufficient to melt but not to burn the thermoplastic material (column 5, lines 15-16); and pressing the cutting edge (121) implement toward the substrate (122) with the plurality of layers of film pinched therebetween, until the cutting edge implement (121) melts through the plurality of layers film, contacts the substrate, and seals the plurality of layers of film together (figures 15-16; column 5, lines 25-26).

In reference to claim 24 and its limitations as stated above, Coleman et al. discloses a method for severing and sealing a film formed of a thermoplastic material further comprising the step of feeding the plurality of layers of film in a lateral direction (column 5, lines 4-8), and synchronously moving the substrate and the cutting edge implement in the lateral direction during the pinching and pressing steps (figures 15-16; column 5, lines 21-25).

Regarding claim 25 and its limitations as stated, Coleman et al. discloses a method for severing and sealing a film formed of a thermoplastic material further comprising prior to the pinching step, heating the cutting edge implement (121) to the sufficient temperature (column 5, lines 15-28),

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3721

5. Claims 4, 11, 18 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman et al. (USPN 5, 546,732) as applied to claims 1, 15 and 23 above, and further in view of Noel et al. (USPN 5, 718,101).

In reference to claims 4, 11, 18, 26 and their limitations as stated above, Coleman et al. discloses a method of severing and sealing a film formed of a thermoplastic material wherein the cutting edge implement (121) is a hot blade, not a hot wire, and further comprising the step of prior to the moving step, supporting the hot blade for substantially its entire effective cutting length (figure 16). Noel et al. teaches that it is well known in the art to substitute a blade for wire for the purpose of severing and sealing (column 6, lines 31-33). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the cutting edge implement of Coleman et al. to include the a hot wire, as taught in the method of Noel et al.

6. Claims 5-6, 9-10, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman et al. (USPN 5, 546,732) as applied to claim 1, 8 and 15 above, and further in view of Gorlich et al. (USPN 6,305,149).

Regarding claims 5-6, 9-10, and 19-20 and its limitations as stated above, Coleman et al discloses a method of severing and sealing a film formed of a thermoplastic material wherein the heating step comprises heating the cutting edge implement, but Coleman et al. does not disclose the temperature range in which the cutting edge is heated. Gorlich et al. teaches heating a cutting edge to a temperature of less than 800°F but greater than 600°F (column 8, lines 55-67; column 9, lines 1-3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to heat the cutting edge of Coleman et al. to a temperature of less than 800°F but greater than 600°F, as taught in Gorlich et al. for the purpose of sealing and severing the film without burning the film.

Art Unit: 3721

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman et al. (USPN 5, 546,732) as applied to claim 8 above, and further in view of Dworak et al. (USPN 5,094,657).

Regarding claim 12 and its limitations and its limitations as stated above, Coleman et al. discloses a method of severing and sealing a film formed of a thermoplastic material including the step of pinching film between a cutting edge implement (121) and another surface (122; figure 15), but does not disclose the amount of time that this step occurs. Dworak et al. teaches the method of severing and sealing a film wherein the cutting edge pinches film between another surface for approximately one second (column 4, lines 42-60). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Coleman to include the step of pinching the film between the cutting edge implement and another surface for approximately one second, as taught by Dworak et al.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman et al. (USPN 5, 546,732) as applied to claim 8 above, and further in view of Gorlich et al. (USPN 5,689,937).

With respect to claim 13 and its limitations as stated above, Coleman et al. discloses a method of severing and sealing a film formed of a thermoplastic material wherein the passing step comprises advancing the cutting edge implement (121) through film, but not through an opening in another surface. Gorlich et al. teaches a method for severing and sealing a film wherein a cutting edge implement (304) advances through an opposing surface (figure 15). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the opposing surface of Coleman et al. to include an opening, as taught by Gorlich et al., for the

Art Unit: 3721

purpose of implementing the step of allowing the cutting edge implement to pass through the opposing surface.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to attachment for notice of references cited and recommended for consideration.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gloria R Weeks whose telephone number is (703) 605-4211. The examiner can normally be reached on 6:30 am - 5:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on (703) 305-2187. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7769 for regular communications and (703) 308-7769 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-1789.

Gloria R Weeks
Examiner
Art Unit 3721

grw
March 4, 2002



Rinaldi I. Rada
Supervisory Patent Examiner
Group 3700

Attachment for PTO-948 (Rev. 03/01, or earlier)
6/18/01

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in ABANDONMENT of the application.